REMARKS

This Amendment is prepared in response to the Office action mailed on 9 March 2009 (Paper No. 20090304).

Listing of The Claims

Pursuant to 37 CFR §121(c), the claim listing, including the text of the claims, will serve to replace all prior versions of the claims, in the application.

Status of The Claims

Claims 1, 4-8, 10-15, 19-23, 25-27, 31-35 and 37 are pending in the application.

Amendment of The Claims

Claims 1, 10, 14, 25 and 27 are amended, and claims 9, 24 and 36 are canceled.

More specifically, the Applicant incorporates the definitions of claim 9 into claim 1, incorporates the definitions of claim 24 into claim 14, and incorporates the definitions of claim 36 into claim 27.

The Applicant amended claims 10 and 25 in order to achieve correct dependency.

Election/Restrictions

The restriction requirement was withdrawn. Accordingly Claims 9-11, 24-25 and 36-37 are no longer withdrawn from consideration.

The Applicant acknowledged that the Examiner withdrew the final rejection of 16 December 2008 because the Examiner found that the Applicant's arguments filed on 12 February 2009 were persuasive.

Issues Raised by Paper No. 20090304

Claim Rejections - 35 U.S.C. §103(a)

I. Claims 1,8, 9 and 11 are rejected under 35 U.S.C. §103(a) as being unpatentable over Osamu et al., (JP 2000-208130, refer to IPDL JPO machine translation for citation) in view of Yoshimura et al. (JP 06-096793, refer to IPDL JPO machine translation for citation)

Claims 1 and 8

The Examiner proposed a combination of Osamu '130 and Yoshimura '793 in order to reject the Applicant's claims 1 and 8. T he Applicant incorporates the definitions of claim 9 into claim 1.

The Applicant disagrees with the Examiner's assertion for the following reasons.

Firstly, the Examiner on page 6 of Paper No. 20090304 asserted that "it would have been obvious to one of ordinary skill in the art at the time the invention was made to utilize Yoshimura et al's electrolyte injection hole (6), because Yoshimura et al. teaches that this electrolyte injection hole (6) is the pouring-in mouth used for pouring the electrolyte into a battery case in order to promptly distribute the electrolyte between the electrodes and battery case." The Applicant disagrees with the Examiner's assertion because Yoshimura '793's motivation of promptly distributing the electrolyte within the battery case does not lead one skilled in the art to modify Osamu '130 by Yoshimura '793.

The Applicant submits that Yoshimura '793 provides a method of charging a polar plate of a battery after the electrolyte is poured into the can, in order to drive the gas out of a can of the battery. By the step of charging of the polar plate, the electrolyte will be evenly distributed within the can of the battery. (See Yoshimura '793's paragraph [0013]) In other words, the structure of Yoshimura '793's electrolyte injection hole 6 has nothing to do with the improvement of the distribution of the electrolyte in Yoshimura '793's invention. Therefore, after studying Yoshimura '793 and Osamu '130, one skilled in the

art may use Yoshimura '793's step of charging of the polar plate of Osamu '130's battery after the electrolyte is poured into the can of Osamu '130's battery, however, would have no motivation to use Yoshimura '793's electrolyte injection hole 6 in Osamu '130's battery.

Secondly, Osamu '130 teaches away from the Applicant's injection inlet. Osamu '130 as shown in FIG. 2, clearly teaches injection hole 14 which has a smaller lower opening compared to the upper opening. The Applicant's injection inlet however, has a bigger lower opening compared to the upper opening as defined by claims 1 and 8.

Thirdly, Osamu '130's plug 16 has a shape which fits well to injection hole 14. Even though Osamu '130's injection hole 14 is modified by Yoshimura '793's electrolyte injection hole 6, the Yoshimura '793's electrolyte injection hole 6 having slop sides would not be well stopped by Osamu '130's plug 16. Therefore, Osamu '130's injection hole 14 would not satisfy its intended purpose.

MPEP §2143.01 states that:

> "If proposed modification would render the prior art invention being modified unsatisfactory for its intended purpose, then there is no suggestion or motivation to make the proposed modification."

Therefore, the Examiner is respectively requested to withdraw the rejection to claims 1 and 8.

_____**Fourthly,** the Examiner further cited Osamu '130's injection hole 14 which has a step structure and asserted that the combination of Osamu '130 and Yoshimura '793 teaches the Applicant's injection hole which has a stepped portion. The Applicant disagrees with the Examiner's assertion because Osamu '130 teaches away from the structure of the Applicant's injection hole.

As shown in Osamu '130's FIG. 2, injection hole 14 has a stepped portion where the lower opening is smaller compared to the upper opening. On the other hand, the Applicant's amended claim 1 defines a electrolytic solution inlet which has a bigger lower opening compared to the upper opening as shown in FIG. 8. Therefore, Osamu '130's injection hole 14 teaches away from the Applicant's invention as defined by the amended claim 1.

In summary, the Examiner's proposed combination is NOT proper, and thus the Examiner is requested to withdraw the rejection to the amended claim 1 and claim 8.

Claim 11

The Applicant notes that the Examiner's proposed combination does not contemplate the Applicant's injection inlet having an enlarged second opening disposed on a second surface of the cap plate. Consequently, claim 11 is not tendered obvious by the Examiner proposed combination.

II. Claims 4 through 6 are rejected under 35 U.S.C. 103(a) as being unpatentable over Osamu et al., (JP 2000-208130) in view of Yoshimura et al., (JP 06-096793)as applied to claims 1, 8-9 and 11 above, and further in view of Uba (US 4,421,832).

The Applicant notices that the Examiner's proposed combination does not contemplate the Applicant's injection inlet having an enlarged second opening disposed on a second surface of the cap plate. Consequently, claims 4 through 6 are not tendered obvious by the Examiner proposed combination.

III. Claim 7 is rejected under 35 U.S.C. 103(a) as being unpatentable over Osamu et al., (JP 2000-208130) in view of Yoshimura et al., (JP 06-096793) and Uba (US 4,421,832) as applied to claims 1, 4-6, 8-9 and 11 above, and further in view of Planchat (US 4,735,630).

The Applicant notes that the Examiner's proposed combination does not contemplate the Applicant's injection inlet having an enlarged second opening disposed on a second surface of the cap plate. Consequently, claim 7 is not tendered obvious by the Examiner proposed combination.

IV. Claim 10 is rejected under 35 U.S.C. 103(a) as being unpatentable over Osamu et al., (JP 2000-208130) in view of Yoshimura et al., (JP 06-096793), Uba (US 4,421,832) and Planchat (US 4,735,630) as applied to claims 1, 4-9 and 11 above, and further in view of Watari (JP 2001-313022, refer to IPDL JPO machine translation for citation).

The Applicant notes that the Examiner's proposed combination does not contemplate the Applicant's injection inlet having an enlarged second opening disposed on a second surface of the cap plate. Consequently, claim 10 is not tendered obvious by the Examiner proposed combination.

V. Claims 12 and 13 are rejected under 35 U.S.C. 103(a) as being unpatentable over Osamu et al., (JP 2000-208130) in view of Yoshimura et al., (JP 06-096793), Uba (US 4,421,832), Planchat (US 4,735,630) and Watari (JP 2001-313022) as applied to claims 1, and 4-11 above, and further in view of Masumoto et al. (WO 2003/003485, refer to English equivalent US 2003/0180582 for cited information).

The Applicant notes that the Examiner's proposed combination does not contemplate the Applicant's injection inlet having an enlarged second opening disposed on a second surface of the cap plate. Consequently, claims 12 and 13 are not tendered obvious by the Examiner proposed combination.

VI. Claims 14, 23, 24 and 26 are rejected under 35 U.S.C. 103(a) as being unpatentable over Osamu et al., (JP 2000-208130) in view of Yoshimura et al., (JP 06-096793), Masumoto et al. (WO 2003/003485), applied to 1 and 4-13 above.

The Applicant incorporates the definitions of claim 24 into claim 14. The arguments against the Examiner's rejection to the amended claims 1 and claims 4 through 13 are applied to the Examiner's rejection to the amended claims 14, and claims 23, 24 and 26.

VII. Claims 15, 27, 35 and 36 are rejected under 35 U.S.C. 103(a) as being unpatentable over Osamu et al., (JP 2000-208130) in view of Yoshimura et al., (JP 06-096793), and Masumoto et al. (WO 2003/003485) as applied to 1, 4-14, 23-24 and 26 above, and further in view of Yamahira et al. (US 2002/0012829).

Claim 15

The Applicant notes that the Examiner's proposed combination does not contemplate the Applicant's injection inlet having an enlarged second opening disposed on a second surface of the cap plate. Consequently, claim 15 is not tendered obvious by the Examiner proposed combination.

Claim 27

The Applicant amended claim 27 by incorporating the definitions of claim 36.

The Examiner cited Yamahira '829 and asserted that Yamahira '829's gasket 43 is equivalent to the Applicant's insulating plate 43. The Applicant submits that, as shown in FIG. 12, Yamahira '829's solution injection port 45 has a step in order to improve mechanical strength. (See paragraph [0059]) Yamahira '829's gasket 43 is not wholly disposed on one surface of the plate having solution injection port 45, but is partially disposed on both sides of the plate having solution injection port 45. Therefore, the Examiner's proposed combination fails to teach the Applicant's "insulating plate arranged on a second surface of the cap plate."

The Examiner cited Osamu '130's injection hole 14 which has a step structure and asserted that the combination of Osamu '130 and Yoshimura '793 teaches the Applicant's injection hole which has a stepped portion. The Applicant disagrees with the Examiner's

assertion because Osamu '130 teaches away from the structure of the Applicant's injection hole.

As shown in Osamu '130's FIG. 2, injection hole 14 has a stepped portion where the lower opening is smaller compared to the upper opening. On the other hand, the Applicant's amended claim 27 defines a electrolytic solution inlet which has a bigger lower opening compared to the upper opening as shown in FIG. 8. Therefore, Osamu '130's injection hole 14 teaches away from the Applicant's invention as defined by the amended claim 1.

In summary, the amended claim 27 is not tendered obvious by the Examiner proposed combination.

Claims 35 and 36

The arguments against the Examiner's rejection to claim 8 are respectively applied to claim 35.

Claim 36 is canceled.

VIII. Claims 19-21 and 31-33 are rejected under 35 U.S.C. 103(a) as being unpatentable over Osamu et al., (JP 2000-208130) in view of Yoshimura et al., (JP 06-096793), and Masumoto et al. (WO 2003/003485) and Yamahira et al. (US 2002/0012829) as applied to 1, 4-15, 23-24 26-27 and 35-36 above, and further in view of Uba (US 4,421,832).

The arguments against the Examiner's rejection to claims 4 through 6 are respectively applied to claims 19-21 and 31-33.

IX. Claims 22 and 34 are rejected under 35 U.S.C. 103(a) as being unpatentable over Osamu et al., (JP 2000-208130) in view of Yoshimura et al., (JP 06-096793), Masumoto et al. (WO 2003/003485) and Yamahira et al. (US 2002/0012829) and Uba (US 4,421,832) as applied to 1, 4-15, 19-21, 23-24, 26-27, 31-33 and 35-36 above, and further in view of Planchat (US 4,735,630).

The arguments against the Examiner's rejection to claim 7 are respectively applied to claims 22 and 34.

X. Claims 25 and 37 are rejected under 35 U.S.C. 103(a) as being unpatentable over Osamu et al., (JP 2000-208130) in view of Yoshimura et al., (JP 06-096793), Masumoto et al. (WO 2003/003485), Yamahira et al. (US 2002/0012829), Uba (US 4,421,832) and Planchat (us 4,735,630) as applied to 1, 4-15, 19-24, 26-27 and 31-36 above, and further in view of Watari (JP 2001-313022).

The arguments against the Examiner's rejection to claim 10 are respectively applied to claims 25 and 37.

Claim Rejections - 35 U.S.C. §103(a)

I. Claims 1, 8, 9 and 11 are rejected under 35 U.S.C. §103(a) as being unpatentable over Osamu et al., (JP 2000-208130, refer to IPDL JPO machine translation for citation) in view of Zupancic (US 4,592,970).

Claims 1 and 8

The Examiner proposed a combination of Osamu '130 and Zupancic '970 in order to reject the Applicant's claim 1. The Applicant disagrees with the Examiner's assertion for the following reasons. Furthermore, the Applicant incorporates the definitions of claim 9 into claim 1.

Firstly, the Examiner on pages 28 and 29 of Paper No. 20090304 asserted that "it would have been obvious to one of ordinary skill in the art at the time the invention was made to utilize Zupancic's orifice (23) with the sloping sides with sealant disposed between the injection hole (14) and the plug (16) inserted in the injection hole (14), because Zupancic teaches that this orifice (23) with the sealant (27) disposed between the orifice (23) walls and the liner (29) inserted in the orifice (23) is critically important to retard creepage of electrolyte (Figure 1; column 9, lines 23-67)." The Applicant disagrees with the Examiner's assertion, because Zupancic '970's sealant layer 27 for retarding

creepage of the electrolyte does not lead one skilled in the art to modify Osamu '130 by Zupancic '970.

The Applicant submits that Zupancic '970 uses sealant layer 27 in order to seal the gap between the wall defining orifice 23 and polytetrafluoroethylene liner 29. (See Zupancic '970's lines 48 through 51 of column 9) It is important for the Examiner to understand that Zupancic '970 uses the same opening disposed in cover 40 for both of electrolyte injection orifice 23 and vent orifice 25. In other words, Zupancic '970's sealant layer 27 is used only when the electrolyte injection inlet and the vent shares the same opening in cover 40. Osamu '130's invention nowhere mentions that Zupancic '970's electrolyte injection orifice 23 and vent orifice 25 share the same opening, therefore, Zupancic '970's sealant layer 27 is not necessarily used in Osamu '130. Therefore, after studying Zupancic '970's and Osamu '130, one skilled in the art would have no motivation to use Zupancic '970's sealant layer 27 to Osamu '130's battery.

Additionally, the structure of Zupancic '970's electrolyte injection orifice 23 has nothing to do with retarding creepage of the electrolyte. Therefore, one skilled in the art would have no motivation to modify Osamu '130 by Zupancic '970's structure of electrolyte injection orifice 23.

Secondly, Osamu '130 teaches away from the Applicant's injection inlet. Osamu '130 as shown in FIG. 2, clearly teaches injection hole 14 which has a smaller lower opening compared to the upper opening. The Applicant's injection inlet however, has a bigger lower opening compared to the upper opening as defined by claims 1 and 8.

Thirdly, Osamu '130's plug 16 has a shape which fits well to injection hole 14. Even though Osamu '130's injection hole 14 is modified by Zupancic '970's orifice 23, the Zupancic '970's orifice 23 having slop sides would not be well stopped by Osamu '130's plug 16. Therefore, Osamu '130's injection hole 14 would not satisfy its intended purpose.

MPEP §2143.01 states that:

> "If proposed modification would render the prior art invention being modified unsatisfactory for its intended purpose, then there is no suggestion or motivation to make the proposed modification."

Fourthly, the Examiner further cited Osamu '130's injection hole 14 which has a step structure and asserted that the combination of Osamu '130 and Zupancic '970's teaches the Applicant's injection hole which has a stepped portion. The Applicant disagrees with the Examiner's assertion, because Osamu '130 teaches away from the structure of the Applicant's injection hole.

As shown in Osamu '130's FIG. 2, injection hole 14 has a stepped portion where the lower opening is smaller compared to the upper opening. On the other hand, the Applicant's amended claim 1 defines a electrolytic solution inlet which has a bigger lower opening compared to the upper opening as shown in FIG. 8. Therefore, Osamu '130's injection hole 14 teaches away from the Applicant's invention as defined by claim 9.

In summary, the Examiner's proposed combination is NOT proper, and thus the Examiner is requested to withdraw the rejection to the amended claim 1 and claim 8.

Claim 11

The Applicant further notes that the Examiner's proposed combination does not contemplate the Applicant's injection inlet having an enlarged second opening disposed on a second surface of the cap plate. Consequently, claim 11 is not tendered obvious by the Examiner proposed combination.

II. Claims 4 through 6 are rejected under 35 U.S.C. 103(a) as being unpatentable over Osamu et al., (JP 2000-208130) in view of Zupancic (US 4,592,970) as applied to claims 1, 8-9 and 11 above, and further in view of Uba (US 4,421,832).

The Applicant notes that the Examiner's proposed combination does not contemplate the Applicant's injection inlet having an enlarged second opening disposed on a second surface of the cap plate. Consequently, claims 4 through 6 are not tendered obvious by the Examiner proposed combination.

III. Claim 7 is rejected under 35 U.S.C. 103(a) as being unpatentable over Osamu et al., (JP 2000-208130) in view of Zupancic (US 4,592,970) and Uba (US 4,421,832) as applied to claims 1, 4-6, 8-9 and 11 above, and further in view of Planchat (US 4,735,630).

The Applicant notes that the Examiner's proposed combination does not contemplate the Applicant's injection inlet having an enlarged second opening disposed on a second surface of the cap plate. Consequently, claim 7 is not tendered obvious by the Examiner proposed combination.

IV. Claim 10 is rejected under 35 U.S.C. 103(a) as being unpatentable over Osamu et al., (JP 2000-208130) in view of Zupancic (US 4,592,970), Uba (US 4,421,832) and Planchat (US 4,735,630) as applied to claims 1, 4-9 and 11 above, and further in view of Watari (JP 2001-313022, refer to IPDL JPO machine translation for citation).

The Applicant notes that the Examiner's proposed combination does not contemplate the Applicant's injection inlet having an enlarged second opening disposed on a second surface of the cap plate. Consequently, claim 10 is not tendered obvious by the Examiner proposed combination.

V. Claims 12 and 13 are rejected under 35 U.S.C. 103(a) as being unpatentable over Osamu et al., (JP 2000-208130) in view of Zupancic (US 4,592,970), Uba (US 4,421,832), Planchat (US 4,735,630) and Watari (JP 2001-313022) as applied to claims 1, and 4- 11 above, and further in view of Masumoto et al., (WO 2003/003485, refer to English equivalent US 2003/0180582 for citation).

The Applicant notes that the Examiner's proposed combination does not contemplate the Applicant's injection inlet having an enlarged second opening disposed on a second surface of the cap plate. Consequently, claims 12 and 13 are not tendered obvious by the Examiner proposed combination.

VI. Claims 14, 23-24 and 26 are rejected under 35 U.S.C. 103(a) as being unpatentable over Osamu et al., (JP 2000-208130) in view of Zupancic (US 4,592,970) and Masumoto et al., (WO 2003/003485), as applied to 1 and 4-13 above.

The Applicant amends claim 14 by incorporating definitions of claim 24 into claim 14.

The arguments against the Examiner's rejection to the amended claim 1 and claims 4-13 are applied to the Examiner's rejection to the amended claim 14, and claims 23, 24 and 26.

VII. Claims 15, 27, 35 and 36 are rejected under 35 U.S.C. 103(a) as being unpatentable over Osamu et al., (JP 2000-208130) in view of Zupancic (US 4,592,970) and Masumoto et al., (WO 2003/003485), as applied to 1, 4-14, 23-24 and 26 above, and further in view of Yamahira et al., (US 2002/0012829).

Claim 15

The Applicant notes that the Examiner's proposed combination does not contemplate the Applicant's injection inlet having an enlarged second opening disposed on a second surface of the cap plate. Consequently, claim 15 is not tendered obvious by the Examiner proposed combination.

Claim 27

The Applicant incorporates the definitions of claim 36 into claim 27.

The Examiner cited Yamahira '829 and asserted that Yamahira '829's gasket 43 is equivalent to the Applicant's insulating plate 43. The Applicant submits that, as shown in

FIG. 12, solution injection port 45 has a step in order to improve mechanical strength. (See paragraph [0059]) Therefore, Yamahira '829's gasket 43 is not wholly disposed on one surface of the plate having solution injection port 45, but is partially disposed on both sides of the plate having solution injection port 45. Therefore, the Examiner's proposed combination fails to teach the Applicant's "insulating plate arranged on a second surface of the cap plate."

The Examiner further cited Osamu '130's injection hole 14 which has a step structure and asserted that the combination of Osamu '130 and Yoshimura '793 teaches the Applicant's injection hole which has a stepped portion. The Applicant disagrees with the Examiner's assertion because Osamu '130 teaches away from the structure of the Applicant's injection hole.

As shown in Osamu '130's FIG. 2, injection hole 14 has a stepped portion where the lower opening is smaller compared to the upper opening. On the other hand, the Applicant's amended claim 27 defines a electrolytic solution inlet which has a bigger lower opening compared to the upper opening as shown in FIG. 8. Therefore, Osamu '130's injection hole 14 teaches away from the Applicant's invention as defined by the amended claim 1.

In summary, the amended claim 27 is not tendered obvious by the Examiner proposed combination.

Claims 35 and 36

The arguments against the Examiner's rejection to claim 8 are respectively applied to claim 35.

Claim 36 is canceled.

VIII. Claims 19-21 and 31-33 are rejected under 35 U.S.C. 103(a) as being unpatentable over Osamu et al., (JP 2000-208130) in view of Zupancic (US 4,592,970), Masumoto et al., (WO 2003/003485), and Yamahira et al., (US 2002/0012829) as applied to 1, 4-15,

23-24, 26-27 and 35-36 above, and further in view of Uba et al., (US 4,421,832).

The arguments against the Examiner's rejection to claims 4 through 6 are respectively applied to claims 19-21 and 31-33.

IX. Claims 22 and 34 are rejected under 35 U.S.C. 103(a) as being unpatentable over Osamu et al., (JP 2000-208130) in view of Zupancic (US 4,592,970), Masumoto et al., (WO 2003/003485), Yamahira et al., (US 2002/0012829), and Uba (US 4,421,832) as applied to 1, 4-15, 23-24, 26-27 and 35-36 above, and further in view of Planchat, (US 4,735,630).

The arguments against the Examiner's rejection to claim 7 are respectively applied to claims 22 and 34.

X. Claims 25 and 37 are rejected under 35 U.S.C. 103(a) as being unpatentable over Osamu et al., (JP 2000-208130) in view of Zupancic (US 4,592,970), Masumoto et al., (WO 2003/003485), Yamahira et al., (US 2002/0012829), Uba (US 4,421,832) and Planchat (US 4,735,630) as applied to 1, 4-15, 19-24, 26-27 and 31-36 above, and further in view of Watari, (JP 2001-313022).

The arguments against the Examiner's rejection to claim 10 are respectively applied to claims 25 and 37.

In view of the foregoing amendments and remarks, all claims are deemed to be allowable and this application is believed to be in condition to be passed to issue. If there are any questions, the examiner is asked to contact the applicant's attorney.

No fee is incurred by this Amendment.

Respectfully submitted,

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